



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,696	11/24/2003	Maria Adamczyk	9400-46 (030311)	8327
39072	7590	04/02/2008	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC, P.A. P.O. BOX 37428 RALEIGH, NC 27627				HALIM, SAHERA
ART UNIT		PAPER NUMBER		
2157				
MAIL DATE		DELIVERY MODE		
04/02/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,696	ADAMCZYK ET AL.	
	Examiner	Art Unit	
	SAHERA HALIM	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 November 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/26/05</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. This Office Action is responsive to communication filled on November 24, 2003.
2. Claims 1-28 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Regarding claims 1-28, the phrase "and/or" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05. For examination purposes the limitations following the phrase are not considered.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-4, 6-13, 15-23, and 25-28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S Pat. Pub. No. 2003/0056092 to Edgett et al. (hereinafter Edgett).**

7. Regarding claim 1, Edgett teaches a data architecture for managing Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) that provides end-to-end transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP), and a Customer Premises Network (CPN) that includes a Routing Gateway (RG), the architecture comprising (see abstract):

a NSP access session record (transaction data record) maintained at the RAN that defines QoS and/or bandwidth allocation for an access session associated with the RG and the NSP (see Fig. 3 and Fig. 14, par. 0252);

a corresponding NSP (Fig. 6, ISP1 and ISP2) access session record (transaction data record) maintained at the NSP associated with the access session, wherein the NSP access session record at the RAN and the corresponding NSP access session record at the NSP both define a QoS and/or bandwidth allocation specified by the NSP associated with the session or both define a QoS and/or bandwidth allocation specified by the RAN (see Fig. 14, par. 0251 – 0257 and Fig. 17A; figure 17 shows, customer tables, access point tables, pricing tables, CDR tables, accounting tables, authentication transaction storage area or tables, batch history storage area or tables and SQM storage or tables) ;

an application flow record maintained at the RAN that defines QoS and/or bandwidth allocation for an application flow associated with the RG and the ASP (see Fig. 14, par. 0251 – 0257 and Fig. 16 -17A; figure 17A shows, customer tables, access point tables, pricing tables, CDR tables, accounting tables, authentication transaction

storage area or tables, batch history storage area or tables and SQM storage or tables);
and

a corresponding application flow record maintained at the ASP associated with the application flow, wherein both the application flow record at the RAN and the corresponding application flow record at the ASP define a QoS and/or bandwidth allocation specified by the ASP (see Fig. 14, par. 0251 – 0257 and Fig. 16 -17A; figure 17A shows, customer tables, access point tables, pricing tables, CDR tables, accounting tables, authentication transaction storage area or tables, batch history storage area or tables and SQM storage or tables).

8. Regarding claim 2, Edgett teaches the data architecture of claim 1 further comprising:

a corresponding NSP access session record maintained at the RG associated with the access session, wherein the NSP access session record at the RAN and the corresponding NSP access session record at the RG both define a QoS and/or bandwidth allocation specified by the NSP associated with the session or both define a QoS and/or bandwidth allocation specified by the RAN (see Fig. 3 and par. 0164, and 0227 – 0234); and

a corresponding application flow record maintained at the RG associated with the application flow, wherein both the application flow record at the RAN and the corresponding application flow record at the RG define a QoS and/or bandwidth

allocation specified by the ASP (see Fig. 3 and par. 0164, and 0227 – 0234).

9. Regarding claim 3, Edgett teaches the data architecture of claim 2 wherein the application flow associated with the RG and the ASP comprises an application flow associated with an access session that supports application service provider communications and wherein the data architecture further comprises:

an application service provider session record maintained at the RAN that defines QoS and/or bandwidth allocation for the access session that supports application service provider communications (see summary and Fig. 3 par. 0073 – 0082); and

a corresponding application service provider session record maintained at the ASP (see Fig. 14 and 16); and

a corresponding application service provider session record maintained at the RG, wherein the application service provider session record at the RAN and the corresponding application service provider session records at the ASP and RG each define a QoS and/or bandwidth allocation specified by the RAN or each define a QoS and/or bandwidth allocation specified by the ASP (See Fig. 3, 14, 16 and 17 par. 0251 - 0260).

10. Regarding claim 4, Edgett teaches the data architecture of claim 3 wherein the NSP access session comprises a Point-to-Point Protocol (PPP) access session and wherein the application flow associated with the RG and the ASP comprises an

application flow associated with a Point-to-Point Protocol (PPP) access session (see par. 0087 and par. 0231).

11. Regarding claim 6, Edgett teaches the data architecture of claim 2 further comprising: a service provider record maintained at the NSP that identifies the NSP (Fig. 3 and 0075 – 0077); a service provider record maintained at the ASP that identifies the ASP; and corresponding service provider records maintained at the RAN that identify the NSP and the ASP, respectively (see par. 0251 – 0278).

12. Regarding claim 7, Edgett teaches the data architecture of claim 6 wherein the service provider records include service provider credentials for the respective service providers that may be used to authenticate a service provider (par. 0093 – 0099).

13. Regarding claim 8, Edgett teaches the data architecture of claim 7 wherein the corresponding service provider records further include authorization information that identifies access sessions for which a respective service provider can specify a QoS and/or bandwidth allocation (par. 0093 and Fig. 16).

14. Regarding claim 9, Edgett teaches the data architecture of claim 8 wherein the corresponding service provider records further include billing information for access to the RAN by the ASP and/or the NSP (Fig. 5, par. 0089 – 0108).

15. Regarding claim 10, Edgett teaches the data architecture of claim 3 wherein the corresponding NSP access session record at the RG further includes access information for use by the RG in accessing the NSP (Fig. 5, par. 0089 – 0108).

16. Regarding claim 11, Edgett teaches the data architecture of claim 3 wherein the corresponding application service provider session record maintained at the RG further includes access information for use by the RG in accessing the ASP (See Fig. 3 and Fig. 5, par. 0089 – 0108).

17. Regarding claim 12, Edgett teaches the data architecture of claim 3 further comprising: a user associated NSP access session record maintained at the RAN that defines QoS and/or bandwidth allocation for a user associated access session between the RG and a different NSP (see par. 0251 – 0278), wherein the RG associates the user associated access session with an individual user on the CPN (Fig. 2 -3 and Fig. 7); a corresponding user associated NSP access session record maintained at the different NSP (see Fig. 6); and a corresponding user associated NSP access session record maintained at the RG, wherein the user associated NSP access session record at the RAN and the corresponding user associated NSP access session records at the different NSP and the RG each define a QoS and/or bandwidth allocation specified by the different NSP or each define a QoS and/or bandwidth allocation specified by the RAN (Fig. 5, par. 0089 – 0108).

18. Regarding claim 13, Edgett teaches the data architecture of claim 12 wherein the user associated access session between the RG and a different NSP comprises a Point-to-Point Protocol (PPP) access session (see par. 0087).

19. Regarding claim 15, Edgett teaches the data architecture of claim 3 wherein the CPN includes an access point used by a subscriber and wherein the data architecture further comprises an NSP access session record maintained on the CPN that includes access information for use by the subscriber in accessing the NSP and wherein the corresponding NSP access session record at the NSP further includes the access information for use by the subscriber in accessing the NSP (see Fig. 3, 6 and 16).

20. Regarding 16, Edgett teaches the data architecture of claim 15 wherein the corresponding NSP access session record at the RG further includes the access information for use by the subscriber in accessing the NSP (Fig. 5, par. 0089 – 0108).

21. Regarding claim 17, Edgett teaches the data architecture of claim 15 wherein the application flow associated with the RG and the ASP comprises an application flow associated with an access session that supports application service provider communications and wherein the data architecture further comprises (see Fig. 3, 6 and 16):

an application service provider session record maintained at the RAN that defines QoS and/or bandwidth allocation for the access session that supports application service provider communications (see Fig. 3, 0073 – 0082);

a corresponding application service provider session record maintained at the ASP (see Fig. 14 and 16);

a corresponding application service provider session record maintained at the RG, wherein the application service provider session record at the RAN and the corresponding application service provider session records at the ASP and RG each define a QoS and/or bandwidth allocation specified by the RAN or each define a QoS and/or bandwidth allocation specified by the ASP (see fig. 3, 14, 16, 17 and par. 251-0260);

an ASP access session record maintained on the CPN that includes access information for use by the subscriber in accessing the ASP; and wherein the corresponding application service provider session record maintained at the ASP further includes the access information for use by the subscriber in accessing the ASP (see fig. 3, 14, 16, 17 and par. 251-0260).

22. Regarding claim 18, Edgett teaches the data architecture of claim 17 wherein the corresponding application service provider session record at the RG further includes the access information for use by the subscriber in accessing the ASP (see fig. 3, 14, 16, 17 and par. 251-0260).

23. Regarding claim 19, Edgett teaches the data architecture of claim 17 further comprising: a plurality of user account records maintained on the CPN and associated with the subscriber that include access information for use by the users in accessing the ASP and/or the NSP; and a corresponding plurality of user account records maintained at the ASP and/or the NSP that include the access information for use by the users in accessing the ASP and/or the NSP (see Fig. 16 and 17 and par. 0251 – 02560).

24. Claims 20-23 and 25 – 28 have similar limitations as to claims 1- 4, 6-13, and 15-19, therefore; they are rejected under the same rational as claims 1- 4, 6-13, and 15-19.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edgett as applied to claims above, and further in view of US. Pat. Pub. 2004/0165592 by Chen et al. (hereinafter Chen).

27. Regarding claim 5, Edgett does not explicitly teach the RG is communicatively coupled to the RAN by an xDSL line that supports the access session and wherein the data record further comprises: a DSL line element maintained at the RG associated with

the xDSL line that includes a line identifier and the synchronization rate of the xDSL line (Fig. 16 and 17); and a corresponding DSL line element including the line identifier and the synchronization rate of the xDSL line maintained at the RAN. However, Chen the RG is communicatively coupled to the RAN by an xDSL line that supports the access session and wherein the data record further comprises (see par. 0025 – 0033): a DSL line element maintained at the RG associated with the xDSL line that includes a line identifier and the synchronization rate of the xDSL line (see par. 0025 – 0033); and a corresponding DSL line element including the line identifier and the synchronization rate of the xDSL line maintained at the RAN (see par. 0025 – 0033). Having the teaching of Edgett and Chen, it would have been obvious for person having ordinary skill in the art at the time of the invention to combine the teaching Chen and Edgett in order to increase networks capability to support guaranteed QoS connections (see 0007).

28. Claims 14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edgett as applied to claims above, and further in view of US. Pat. No. 7,073,055 to Freed (hereinafter Freed).

Edgett does not explicitly teach the data architecture wherein the data architecture includes a plurality of NSP access session records associated with different NSP, RG pairs and wherein the NSP access session records further include a session classifier and wherein the data architecture includes a plurality of application flow records associated with different application flows. However, Freed teaches the data

architecture wherein the data architecture includes a plurality of NSP access session records associated with different NSP (Fig. 6, col. 16, line, 16 - 45), RG pairs and wherein the NSP access session records further include a session classifier and wherein the data architecture includes a plurality of application flow records associated with different application flows (see col. 16, line 46 – col. 17, line 63). Therefore, it would have been obvious for person having ordinary skill in the art at time of the invention to combine teachings of classification as disclosed in Freed with system of Edgett in order to provide dynamic services for remote access users (see col. 4, line 5 - 10).

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US. Pat. No. 6,697,806 to Cook (multiple local data base system, access communication system and user authentication information).

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHERA HALIM whose telephone number is (571)272-4003. The examiner can normally be reached on M-F from 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sahera Halim
Patent Examiner

/Ario Etienne/
Supervisory Patent Examiner, Art Unit 2157